

## **Non-Interference Compliance**

Regarding Facility id 150999

Channel 287

### **Description of Exhibit 12 Contents**

This exhibit demonstrates that the proposed facility complies with contour overlap and interference protection provisions in all of the applicable rule sections and that this application for a construction permit is in full compliance with 47 C.F.R. § 74.1204.

**Let it be noted that should any actual real world interference occur, the applicant acknowledges that it will promptly suspend operation of this translator in accordance with 47 C.F.R. § 74.1203.**

Page 2 of this exhibit is an explanation of the method used to demonstrate compliance with contour overlap and interference provisions based on 47 C.F.R. § 74.1204(d), which states:

*[A]n application otherwise precluded by this section will be accepted if it can be demonstrated that no actual interference will occur due to intervening terrain, lack of population or such other factors as may be applicable.*

Page 3 of this exhibit contains the tabulated data from the interference analysis, which shows all stations whose protected contours come within 50 km of the 34 dBμ F(50,10) contour of the proposed translator. These tabulated values were calculated using data from the FCC's CDBS files and 30 arc second terrain data. The column labeled "Adj" shows the number of channels difference between the entry and the proposed translator. The column labeled "Dist" shows the distance in km. The column labeled "Overlap" shows the area of contour overlap in square kilometers.

Page 4 of this exhibit is a portion of a USGS 1:24,000 scale 7.5 minute quadrangle at full scale with the calculated area of interference overlaid. The sheet includes the quadrangle name and measurement scale at the bottom-left corner (note: "Mt" refers to meters). The area of interference was calculated using the free space equation and 120 radials.

Page 5 of this exhibit is a high resolution aerial photo of the vicinity surrounding the proposed translator's tower site provided by the U.S. Geological Survey's National Aerial Photography Program. It has been included to provide clarification of the nature of the buildings in the vicinity.

**Note: The quadrangle and aerial photo indicate the presence of county roads in the area of interference. It is apparent that these are not major roads, e.g. interstate highways, as described in the Living Way decision. The zone of predicted interference extends 27.5m from the proposed transmit site. The nearest buildings are 181m away to the north west, so a lack of population has been demonstrated within the area of interference and this application is therefore in full compliance with 47 C.F.R. § 74.1204.**

## Compliance with 47 C.F.R. § 74.1204(d)

All authorized second and third adjacent stations with which the proposed translator has contour overlap are tabulated below. Column four show the station's signal level at the proposed translator's tower site, and column five gives the minimum value within the entire standard interfering contour of the proposed translator (100 dBμ for most classes, 94 for class B, 97 for class B1). The minimum second or third adjacent F(50,50) contour within the proposed translator's standard interfering contour was used to calculate the proposed translator's actual "worst-case" interfering contour.

Application_id	File Number	Callsign	Contour at Tower	Min. Contour
1045836	BLH20050210AHX	WZHT	92.1	92.1
Minimum F(50,50) Contour of Adjacent Station within Proposed Translator's Standard Interfering Contour				<b>92.1</b>

FCC 02-244 at Section II.A.5 states that "when demonstrating that 'no actual interference will occur due to . . . other factors,' pursuant to Section 74.1204(d), an applicant may use the undesired-to-desired signal ratio method." The undesired-to-desired ratio for second and third adjacent stations required by § 74.1204(a) is 40 dB. Since the minimum protected contour strength within the proposed translator's standard interference contour is **92.1 dBμ**, this makes the proposed translator's worst-case interfering contour **132.1 dBμ**. By the free-space equation, this contour is calculated to extend a maximum of **27.5 m** from the transmit antenna.

The interfering contour of the proposed translator was calculated for 120 radials and plotted on the pertinent portion of a USGS quadrangle (page 4 of this exhibit). As demonstrated on the quadrangle, there are no populated structures or highways within the area of interference (Note: FCC 02-244 at Section II.A.6 states that USGS quadrangles "have been recognized as acceptable to demonstrate lack of population").

**Note: The quadrangle and aerial photo indicate the presence of county roads in the area of interference. It is apparent that these are not major roads, e.g. interstate highways, as described in the Living Way decision. The zone of predicted interference extends 27.5m from the proposed transmit site. The nearest buildings are 181m away to the north west, so a lack of population has been demonstrated within the area of interference and this application is therefore in full compliance with 47 C.F.R. § 74.1204.**

Antenna Manufacturer:	ALC
Antenna Model:	GP-FM(5/8)
CORAGL:	9 m
Maximum ERP:	0.25 kW
Interfering Contour:	132.1 dBμ
Max Int. Contour Distance:	27.5 m

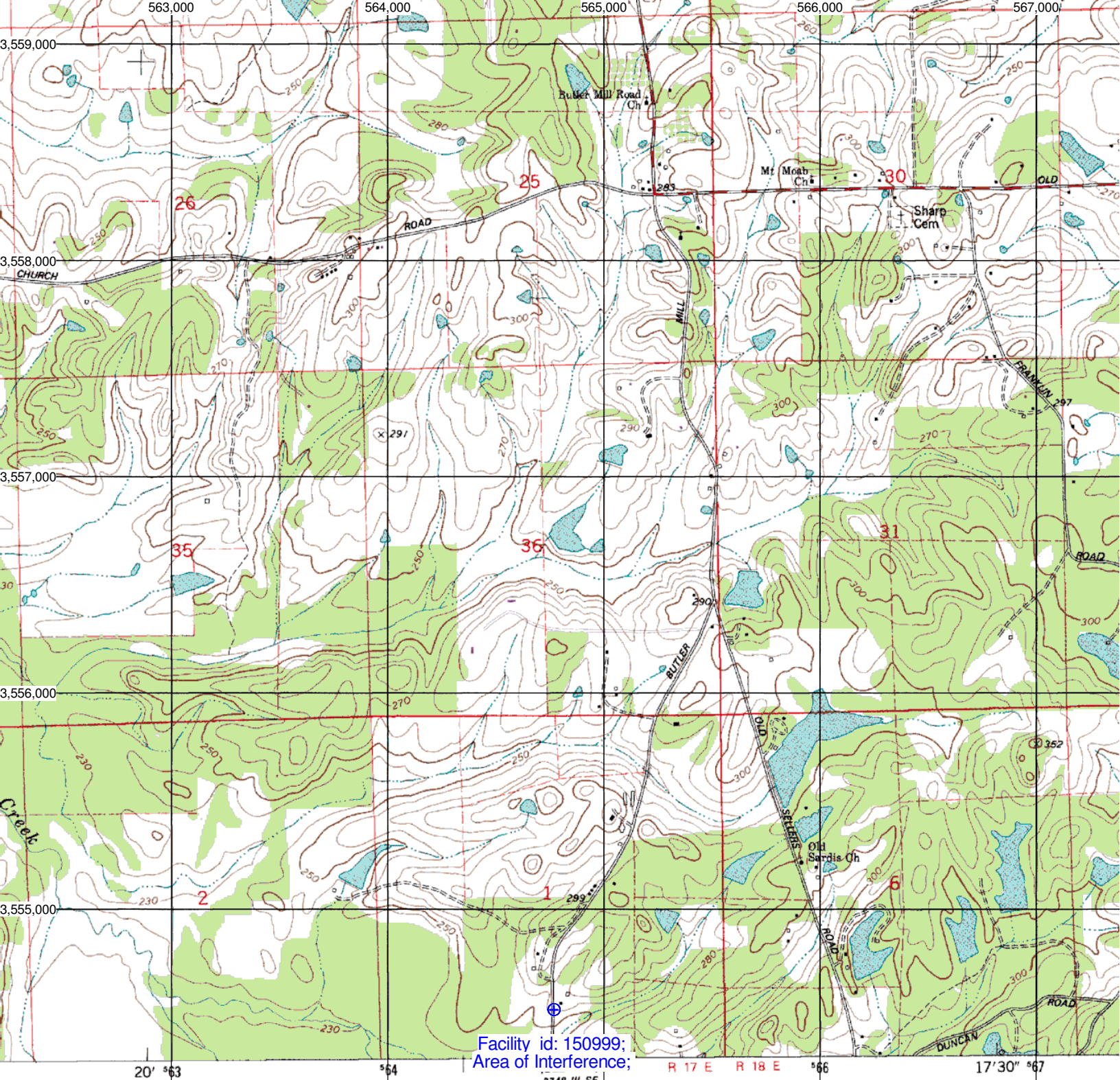
# **Adjacent Channel Study** **For Station W287BO, Facility\_id: 150999**

## **Co-channel through third adjacent:**

Application_id	Facility_id	Prefix	ARN	Call	Licensee	Class	City	State	Status	ERP	RCAMSL	Channel	Adj	Dist	Overlap
1045836	8649	BLH	20050210AHX	WZHT	CAPSTAR TX LIMITED PARTNERSHIP	C	TROY	AL	LIC	100	684	289	2	15	1.4918
285536	51095	BMLH	19990525KA	WOAB	OZARK BROADCASTING CORPORATION	A	OZARK	AL	LIC	6	178	285	2	82.6	0
569708	81739	BLH	20010615AFL	WBFZ	IMANI COMMUNICATIONS CORPORATION, INC.	C2	SELMA	AL	LIC	50	194	287	0	94.8	0
253908	10666	BLH	19970925KG	WDBT	GULF SOUTH COMMUNICATIONS, INC.	C3	HEADLAND	AL	LIC	11.5	229	287	0	123.5	0
997058	74576	BLH	20040601BBO	WPFL	TRI-COUNTY BROADCASTING, INC.	C3	CENTURY	FL	LIC	8.6	232.9	286	1	129.8	0
584766	14495	BLH	20020903AAP	WAAZ-FM	CRESTVIEW BROADCASTING, INC.	C1	CRESTVIEW	FL	LIC	100	189	284	3	135.3	0
628192	48724	BLH	20030130AHE	WZZK-FM	CXR HOLDINGS, INC.	C0	BIRMINGHAM	AL	LIC	97.8	597	284	3	175.3	0

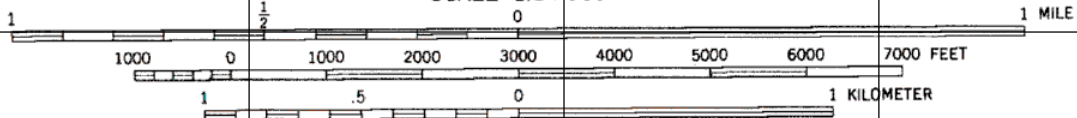
## **Intermediate Frequencies (53 and 54 channels difference):**

Application_id	Facility_id	Prefix	ARN	Call	Licensee	Class	City	State	Status	ERP	RCAMSL	Channel	Adj	Dist	Clr
257374	68181	BLH	19971124KE	WTBF-FM	TROY BROADCASTING CORPORATION	C3	BRUNDIDGE	AL	LIC	14.5	242	234	53	47.6	35.6



Facility id: 150999;  
Area of Interference;

SCALE 1:24 000



CONTOUR INTERVAL 10 FEET  
NATIONAL GEODETIC VERTICAL DATUM OF 1929

THIS MAP COMPLIES WITH NATIONAL MAP ACCURACY STANDARDS  
FOR SALE BY U. S. GEOLOGICAL SURVEY, RESTON, VIRGINIA 22092  
A FOLDER DESCRIBING TOPOGRAPHIC MAPS AND SYMBOLS IS AVAILABLE ON REQUEST



